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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,343	03/02/2005	Amy Christine Dimmick	DN00-047	8933

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EXAMINER	
PARVINI, PEGAH	
ART UNIT	PAPER NUMBER
1793	

MAIL DATE	DELIVERY MODE
05/26/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,343	DIMMICK ET AL.	
	Examiner	Art Unit	
	PEGAH PARVINI	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *13-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/5/2009 and 2/2/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

The rejection of **claims 1-12** under 35 U.S.C. 103(a) over Fortier et al. in view of Suitch et al. as generally presented in the previous Office action is proper and stands.

The rejection of **claims 1-12** under 35 U.S.C. 103(a) over Yaniv et al. in view of Suitch et al. as generally presented in the previous Office action is proper and stands.

The rejection of **claims 1-12** under 35 U.S.C. 103(a) over admitted prior art in the specification of instant application in view of Suitch et al. as generally presented in the previous Office action is proper and stands.

Response to Arguments

Applicants' arguments filed February 2, 2009 have been fully considered but they are not persuasive.

Applicants have argued that Fortier et al. although disclosing a median particle size for the fine-grained aragonite precipitated calcium carbonate ranging from 0.3 and 0.5 microns, do not disclose a composition having first and second calcium carbonate

particles with respective first and second particle size distribution wherein the different between the first and the second particle size distribution is of about 0.1 microns to about 0.2 microns.

The Examiner, respectfully, submits that Fortier et al. was utilized in a 103(a) obviousness rejection in view of Suitch et al.; it is to be noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In fact, Suitch et al. was utilized for the teachings from a Japanese document (JP57184430 to Furusawa et al.) provided in said reference regarding the fact that if two kinds of microscopic calcium carbonate particles with specific and uniform particle sizes and shapes and with sizes different from each other but with a specific relationship were blended in a specific proportion and compounded with constant amounts of a certain kind of dispersant and inorganic electrolytes, the packing density of the calcium carbonate particles was increased, and it was possible to provide a high concentration, low viscosity aqueous dispersion thereof.

Applicants have argued that Furusawa et al. disclose that best packing and rheology for the dispersion taught by said reference are achieved when the particles are sufficiently different in size so as to allow smaller particles to intersperse themselves in the voids between larger particles. Applicants, then, conclude that the smaller particles must necessarily be of a size significantly smaller than the larger particles; thus,

Japanese document teaches away from the instant claims having first and second calcium carbonate particles with only about 0.1 to 0.2 micron difference between the means of their particle size.

The Examiner, respectfully, submits that Applicants although submitting the above statement, but have not provided any evidence within Furusawa et al. (the Japanese document) showing that the particle size difference between different size distribution is not about 0.1 to about 0.2 microns; arguments cannot take the place of evidence. MPEP § 2145. Additionally, Furusawa et al., in fact, disclose mixed calcium carbonate consisting of 60-95 wt% of precipitated calcium carbonate (I) with an average particle size of 0.1-1 micron and 5-40 wt% calcium carbonate (II) having an average particle size of 0.2-0.8 times the first particle size (Furusawa et al. claims, specially claims 1 and 5). Therefore, contrary to what Applicants seem to be arguing, Furusawa et al. teach a small different between the sizes since said reference teaches that the second group of particles may have sizes 0.2 times the size of the fist group of particles; thus, if taking 1micron for the first particles, the size of the second particles would be 1.2microns which is within the claimed size differences as claimed in instant claims.

Therefore, the combination of Fortier et al. in view of Suitch et al. by relying the disclosure of Furusawa et al. in the Suitch et al. disclosure is seen to read on the limitations of instant claims specifically because column 4 of Suitch et al. (taken from Furusawa et al.) clearly teaches that obtaining a high concentration, low viscosity of calcium carbonate particles in a dispersant is achievable when two kind of microscopic calcium carbonate particles with different sizes with a specific relationship between the

sizes and in specific proportions are mixed would results in the type of dispersion indicated above as detailed out previously and repeated above. Therefore, motivation was provided by Suitch et al. on why to have two different size distributions of particles having the features described above in the invention of Fortier et al.

Applicants have argued that the commercially available OPACARB® A40 PCC and OPACARB® A50 PCC disclosed in the admitted prior art in page 7 of the specification, although disclosing mean particle size of 0.4 and 0.5 microns, do not provide a product having both first and second calcium particles with respective first and second particle size distribution having a difference of about 0.1 micron to about 0.2 microns; and do not utilize the specific size distribution claimed.

The Examiner, respectfully, submits that as noted in the previous Office action the admitted prior art was used for its teachings on the commercial availability of OPACARB® A40 PCC and OPACARB® A50 PCC with mean particle sizes of 0.4 microns and 0.5 microns; however, the secondary reference of Suitch et al. was used to make it obvious to have utilized two particle size distribution with particles having specific and uniform particle sizes and shapes and with sizes different from each other but with a specific relationship which when blended in a specific proportion and compounded with constant amounts of a certain kind of dispersant and electrolyte, the packing density of the calcium carbonate particles was increased and it was possible to provide a high concentration, low viscosity aqueous dispersion thereof. Therefore,

motivation was provided by Suitch et al. on why to have two different size distributions of particles having the features described above.

Additionally, the Examiner, respectfully, submits that the admitted prior art of the specification was utilized in a 103(a) obviousness rejection in view of Suitch et al.; it is to be noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants have argued Yaniv et al. disclose the use of calcium carbonate particles exhibiting sizes in the range 0.2-0.4 microns and they would be useful in paper coating and filling, but Yaniv et al. do not disclose any proportions of different size particles.

The Examiner, respectfully, submits that submits that Yaniv et al. was utilized in a 103(a) obviousness rejection in view of Suitch et al.; it is to be noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Suitch et al. was used to make it obvious to have utilized two particle size distribution with particles having specific and uniform particle sizes and shapes and with sizes different from each other but with a specific relationship which when blended in a specific proportion and compounded with constant amounts of a certain kind of

dispersant and electrolyte, the packing density of the calcium carbonate particles was increased and it was possible to provide a high concentration, low viscosity aqueous dispersion thereof. Therefore, motivation was provided by Suitch et al. on why to have two different size distributions of particles having the features described above in the invention of Yaniv et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PEGAH PARVINI whose telephone number is (571)272-2639. The examiner can normally be reached on Monday to Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pegah Parvini/
Examiner, Art Unit 1793

/Michael A Marcheschi/
Primary Examiner, Art Unit 1793